## REMARKS

Reconsideration of the application, as amended, is respectfully requested.

New claims 14-16 are presented, as supported at paragraph 0021 and 0020 of the published application. Claims 2, 11 and 12 are canceled without prejudice.

The problem addressed by the present application is that of providing a process to produce balls of a frozen aerated product using a pair of rollers wherein the ball can be de-moulded without melting its surface or requiring an ejection mechanism. When the corresponding cavities on the pair of rollers pass the point where they are closest to one another, the frozen product in each cavity is pressed against the contiguous product situated in the other cavity, linking the two halves of the product together. The frozen product also sticks to the surface of each cavity. When the rollers rotate further so that the cavities separate, it is desirable that the product should be released from the cavities, and should remain as one piece. However, in some prior arrangements the adhesion of the halves of the product to the cavities is stronger than the adhesion of the halves of the product to each other, and as a result the product tends to remain stuck in the cavities.

The present invention solves the above problem by strengthening the adhesion between the halves of the products. This is achieved by allowing the frozen aerated product to expand outside the cavities before they are brought together. When the cavities reach the point at which they are closest to each other, the halves of the product are forced together producing strong adhesion between them.

The Office cites the Ezaki reference. References to page numbers herein are to the FLS translation of Ezaki. In describing the problem on pages 4 and 5, Ezaki mentions that in the case of chocolate, the product shrinks when cooled down so that the chocolates filled in the depressions of the dye rolls become connected to each other when the corresponding depressions pass through the contact area and then become separated easily from the depressions and fall off because of gravity. Ezaki contrasts ice candies which, it indicates, will become likely to attach to the walls of the depressions when cooled.

In the last five lines of page 3, in its "related art" section, Ezaki indicates that food articles (such as the ice candies) are simply filled inside the depressions up to approximately the same surface levels as the outer periphery levels of the dye rolls so that the food pieces "will be compressed against each other with a relatively weak force, not with a strong force, when the depressions of both sides pass through the contact area." Since the ice candies tend to attach to the walls of the depressions, they remain attached to the walls, and when the depressions become separated some of the ice candies remain in the depressions. In contrast, in the invention as described by Ezaki on page 5, the food pieces "filled in the depressions become mutually compressed with a strong force and become connected reliably when the depressions pass through the contact area since the portions filled in the grooves in the inner sides of the raised sliding surfaces are raised outward from the outer periphery levels of the dye rolls." (Emphasis added) On page 9, Ezaki explains that the ice candy will be filled not only in the depressions but also in the grooves 26b and since the ice candy halves in the depressions are raised outward they come into contact with a strong force and thus become united completely. The Office points to no teaching by Ezaki that the strong force results from any expansion of the products. Ezaki's strong force seems to result

from the fact that the ice candy halves are raised outward, which as described, appears to result from the filling of the portions in the grooves, as explained on Ezaki's page 5.

In summary, as described, Ezaki is filling the ice candies into the compressions and grooves in such a way that portions are raised from the outer periphery levels of the dye rolls so that when the two halves of the ice candy meet, a strong force results. The Office points to no teaching by Ezaki that the strong force results from any expansion of the products.

In addition, the Office has not established that any expansion is permitted since Ezaki appears to fill the ice candy into the small space available. Ezaki (page 4, lines 15-20; page 7, lines 18-22) discloses that raised sliding surfaces (26a) almost contact the outer peripheries of the depressions (cavities) in the rollers. Ezaki further teaches that there are grooves (26b) which are depressions on the inner side of the sliding surfaces. The Office acknowledges that Ezaki teaches that the confection fills not only the depressions or moulds (17, 18) but also the grooves (26b) (page 9, lines 11-12). However, the Office characterizes Ezaki as "thus teaching that there is a space to allow the confection to expand outside the open cavity. The translation says that the ice cream <u>will be filled not only in the depressions 17, 18, but also in the grooves 26b. It does not say that the ice cream is filled into the cavities and it is then allowed to expand into the groove</u>. In other words, the ice cream is pumped in through the filling holes (29) and appears to fill all the available space (i.e. the grooves plus the cavities).

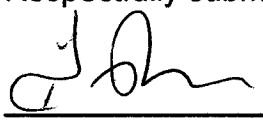
The Office points to no teaching of a similar roller apparatus where the food product is permitted to expand in accordance with applicants' discovery.

Even less does Ezaki teach the invention recited in new claim 14. Claim 14 recites that the forming elements are at a temperature of below -80°C. In contrast, on page 6, Ezaki indicates that the interior of the roll 10 is continually fed with a roll heating fluid 21, which is warm water which causes the ice candies to melt slightly.

As to the provisional obviousness double patenting rejection, applicants respectfully defer action pending indication of allowable subject matter in the '208 application.

In view of the foregoing, it is respectfully requested that the application, as amended, be allowed.

Respectfully submitted,



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